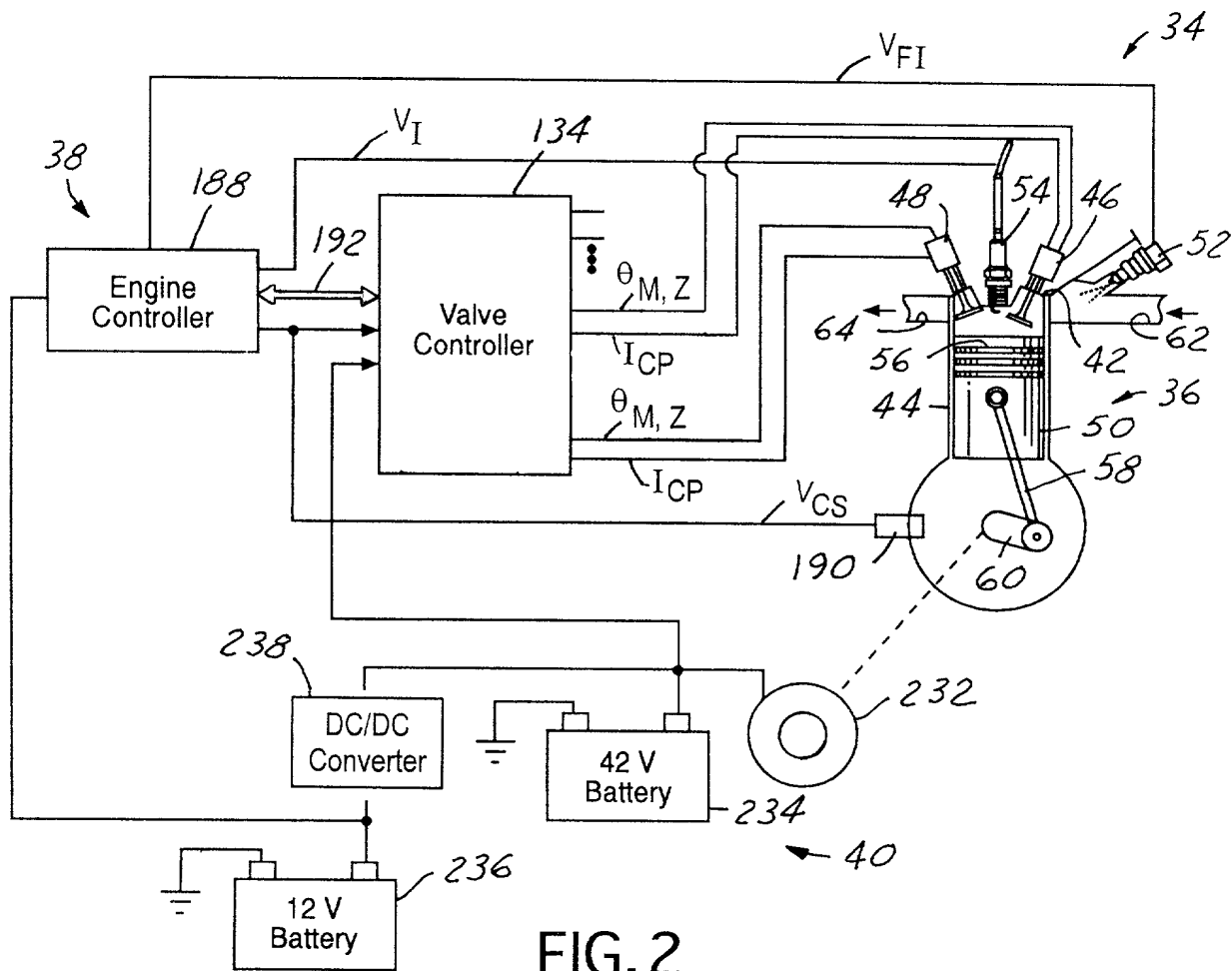


(Prior Art)  
**FIG. 1**



**FIG. 2**

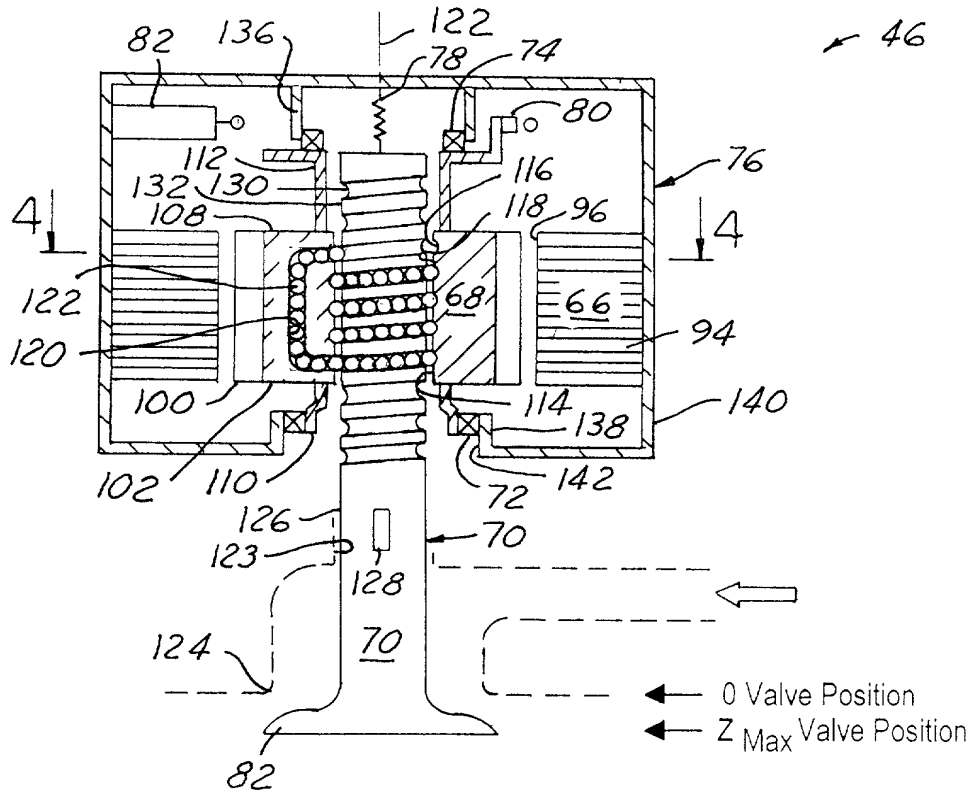


FIG. 3

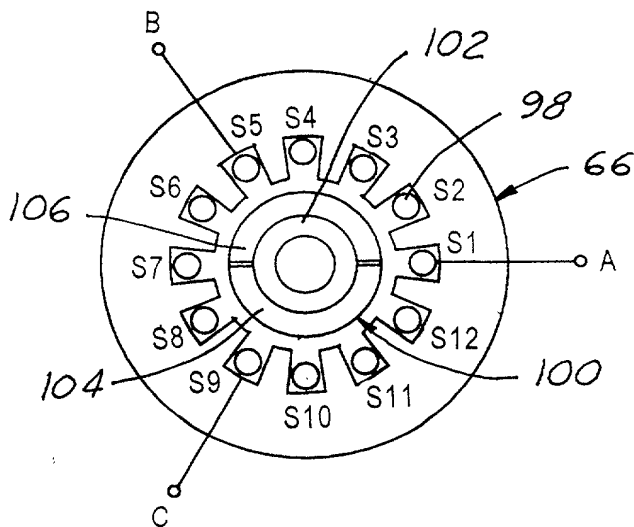


FIG. 4

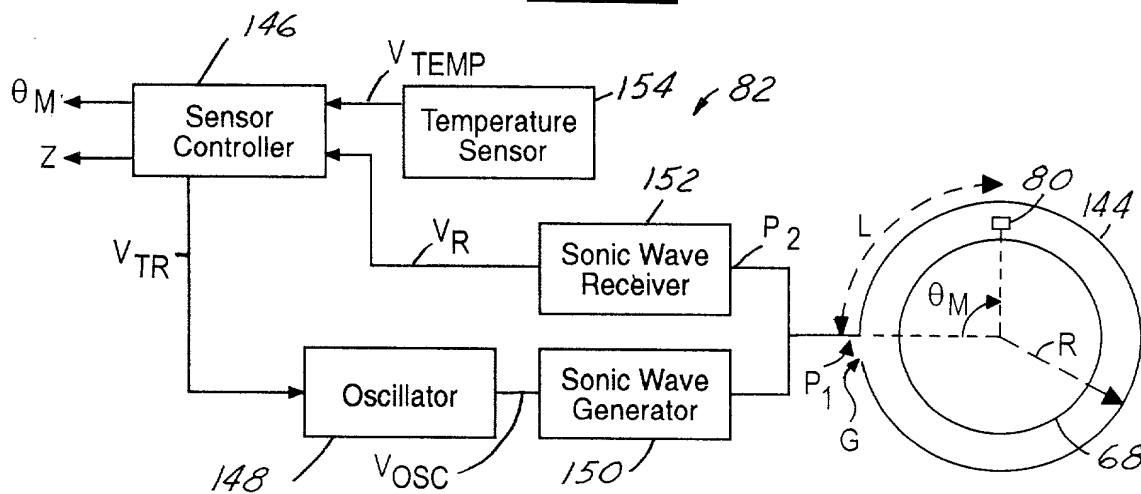
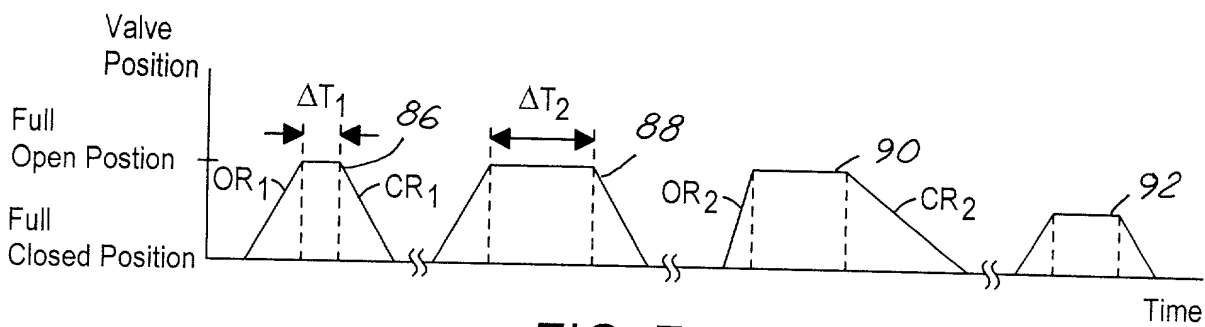
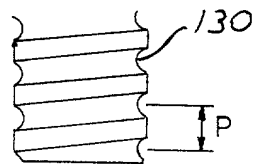
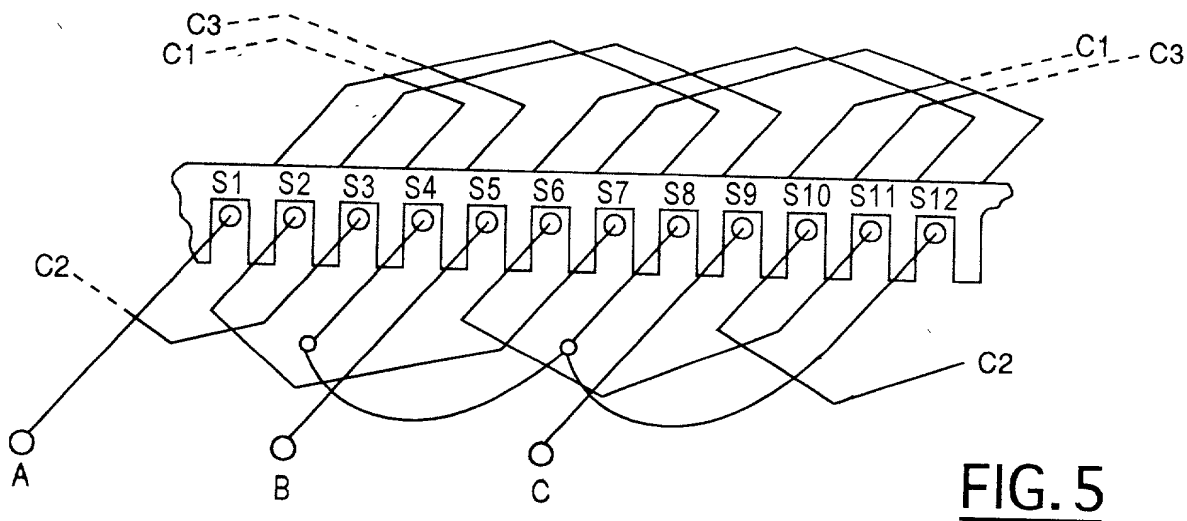


FIG. 8

00733333-120700

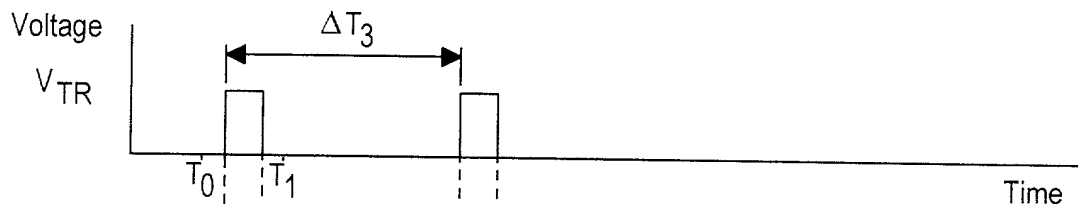


FIG. 9A



FIG. 9B

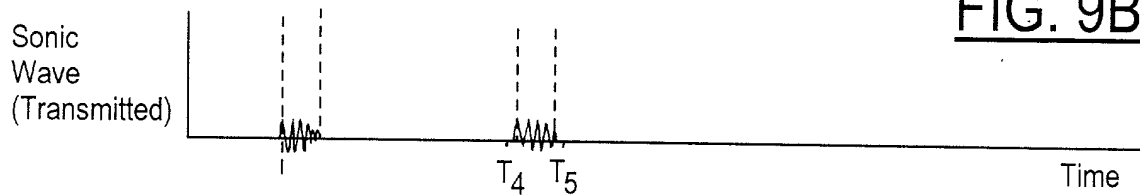


FIG. 9C

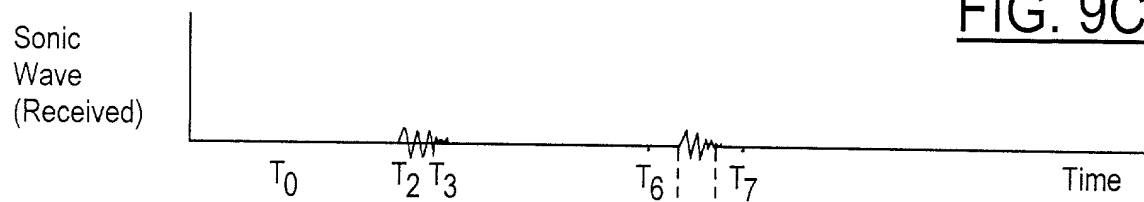


FIG. 9D

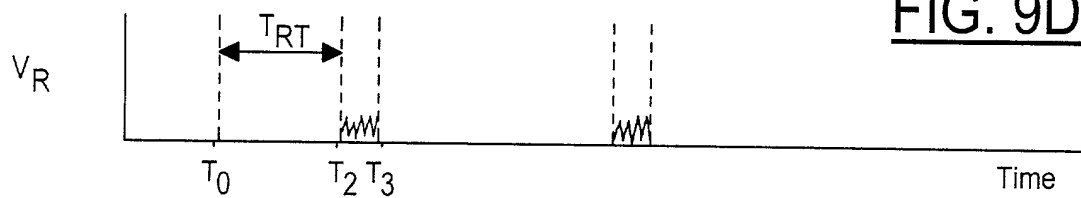


FIG. 9E

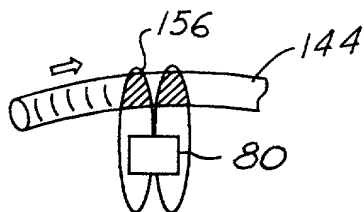


FIG. 10

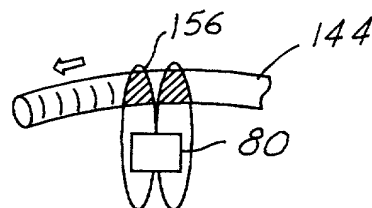


FIG. 11

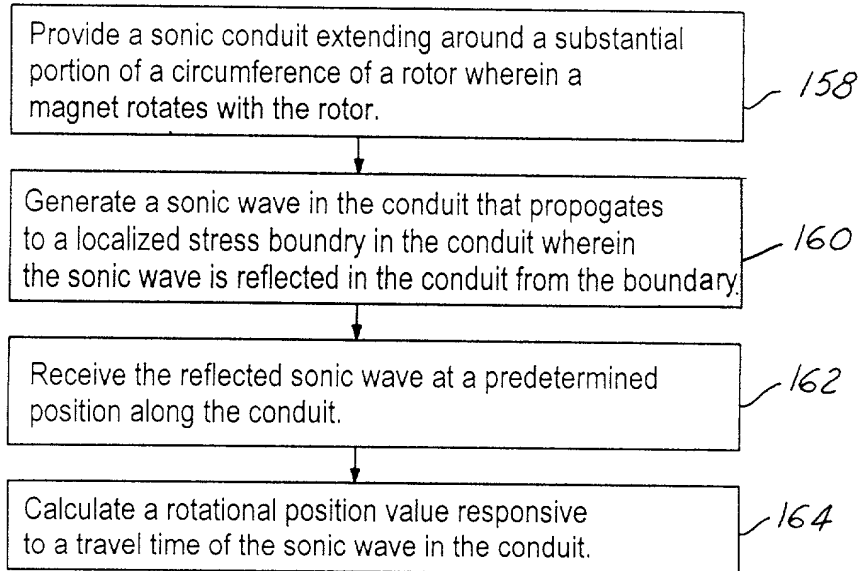


FIG. 12

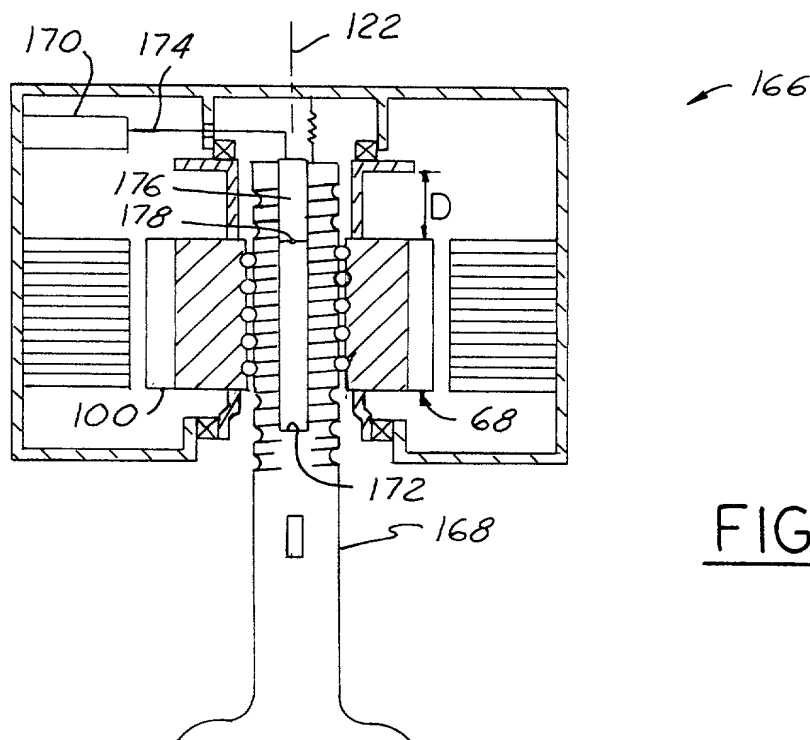
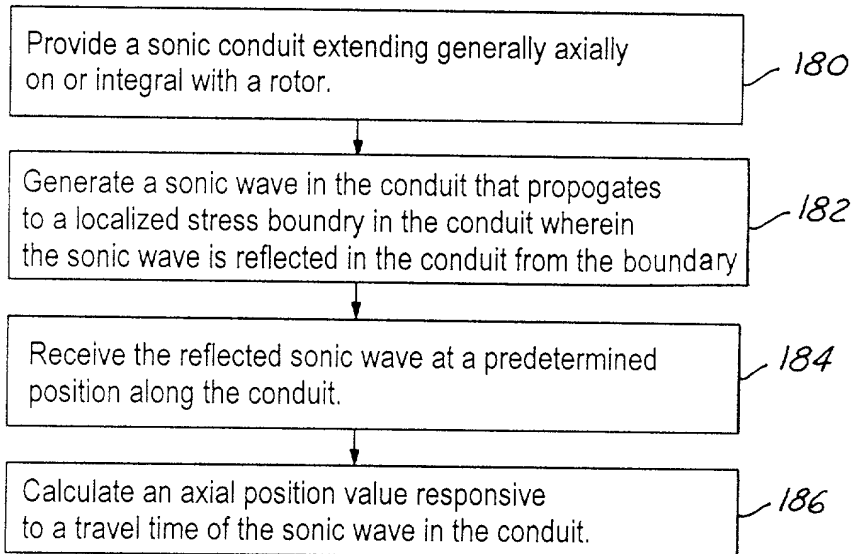
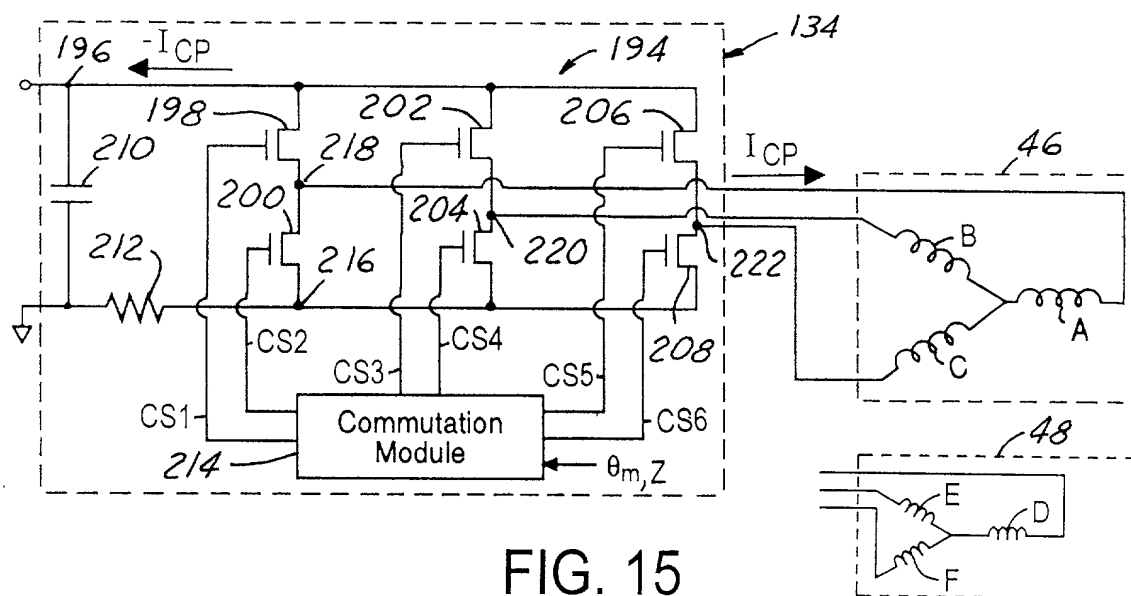


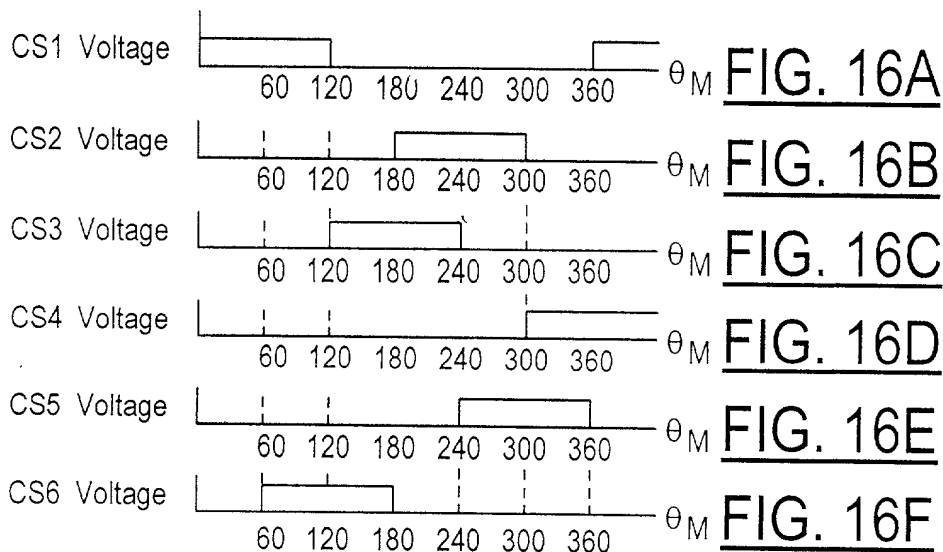
FIG. 13



**FIG. 14**



**FIG. 15**



**FIG. 16A**

**FIG. 16B**

**FIG. 16C**

**FIG. 16D**

**FIG. 16E**

**FIG. 16F**

The graph shows the pressure in a cylinder as a function of volume. The y-axis is labeled 'Pressure' and 'Cylinder Pressure'. The curve starts at a high pressure, decreases linearly to a point, then drops sharply to a lower pressure, and finally remains constant at that lower pressure.

 $\theta_{CS}$ 

FIG. 17A

Valve Position

Full Open Position

Full Closed Position

160

190

215

**FIG. 17A**

 $\theta_{CS}$ 

**FIG. 17B**

FIG. 17E

The graph shows the current  $I_{CP}$  as a function of the angle  $\theta_{CS}$ . The x-axis is marked with values 135, 150, 175, 185, and 200. The y-axis is labeled 'Current' and  $I_{CP}$ . The curve shows a positive peak around 150 degrees, a negative peak around 165 degrees, a positive plateau between 175 and 185 degrees, and another positive peak around 200 degrees. Vertical dashed lines are drawn at approximately 155 and 190 degrees.

 $\theta_{CS}$ 

FIG. 17C

↕ Breaking Current

 $\theta_{CS}$ 

**FIG. 18A**

 $\theta_{CS}$ 

FIG. 18B

 $\theta_{CS}$ 

FIG. 18C

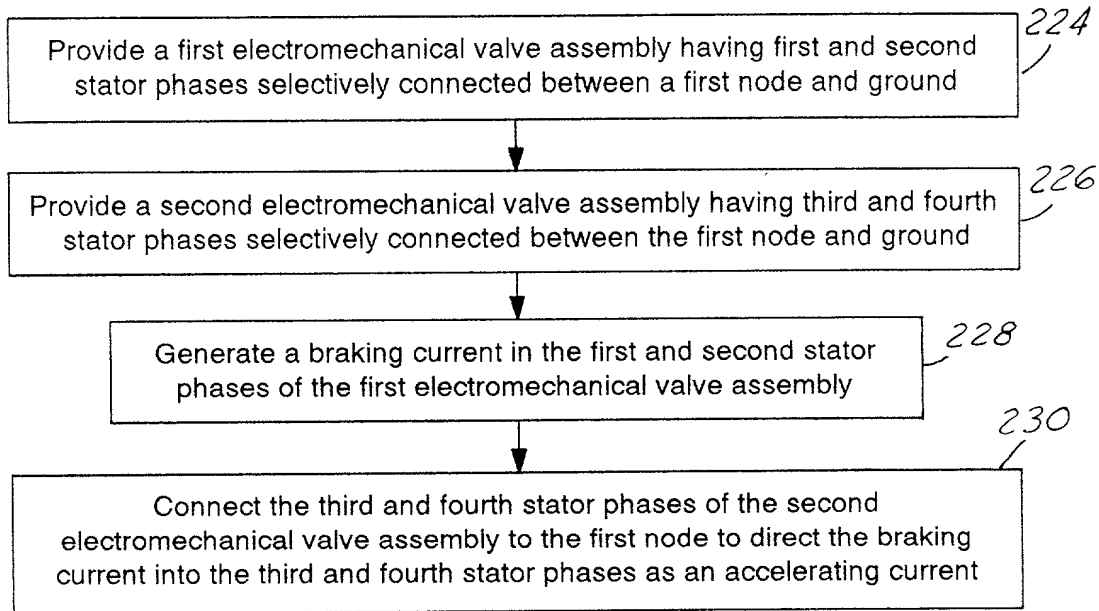


FIG. 19